LANSING CHRISTIAN SCHOOL

High School Academic Program and Course Descriptions

Revised February 2026

High School Academic Program and Course Descriptions

Table of Contents

Vison, Mission, and Core Values — *Page 3*
Schoolwide Learner Goals — *Page 4*
Graduation Requirements — *Page 5*
Grades — *Page 6*

Credit and Grade Policies: — *Page 7*
- *Earning External Credit*
- *Drop/Add Policy*
- *Assigning Class Rank*
- *Repeating Courses*

Registration Procedures — *Page 8*

Course Descriptions:
- *Bible* — *Page 9*
- *Creative Arts* — *Page 11*
- *English Language Arts* — *Page 14*
- *World Language* — *Page 16*
- *Mathematics* — *Page 17*
- *Physical Education* — *Page 23*
- *Science* — *Page 25*
- *Social Studies* — *Page 28*
- *Other Courses or Activities Available* — *Page 32*

Vision

Equipping young men and women to engage the world for Jesus Christ

Mission

Recognizing God as the source of all truth, wisdom and knowledge, Lansing Christian School partners with Christian parents to educate children to the full extent of their God-given abilities. We engage students in an academically challenging environment that fosters spiritual and intellectual as well as social and physical growth. We equip students to exalt God and follow Christ in all aspects of life. We call students to grow in maturity in Jesus Christ, being knowledgeable about our faith, standing firm in our convictions, living as servants within our community, and being stewards of God's creation.

Core Values

We Glorify God in All of Life

Knowing God, loving His Word, and living for Him are the foundation for everything we do at Lansing Christian School. We seek to live our faith in our relationships, our character, and our service.

We Honor God through Excellence

Striving for excellence is expected from all members of the Lansing Christian School community. We foster excellence in academic, co-curricular, and extracurricular programs.

We Live and Learn in Christian Community

Cultivating caring and respectful relationships is integral to every aspect of school life. We prepare students to flourish as they discover and develop their God-given gifts and abilities. We teach, model, and practice servant leadership.

We Partner with Christian Parents

Lansing Christian School exists to assist parents in building a strong Christian foundation for their children. We serve Christian families who desire a Christ-centered education for their children.

LCS Schoolwide Learner Goals

The LCS community pursues academic excellence. As learners, we are equipped with:

Proficiency in foundational knowledge
LCS students demonstrate proficiency in the established curriculum across subject areas, which requires them to *apply* and *connect* ideas to make sense of complex concepts and problems from *multiple perspectives*.

Essential habits of learning
LCS students consistently practice:

- **Curiosity** - asking questions and approaching God's world with wonder
- **Problem solving** - finding solutions through creative and critical thinking
- **Innovative design** - using what we learn to meet real needs in our community
- **Persistence** - meeting challenges with a focus on resilience and growth
- **Effective collaboration** - learning and working together toward shared goals in and out of the classroom
- **Gracious communication** - developing strong listening skills and the ability to communicate ideas orally and in writing

Empathy toward others
LCS students seek to deeply understand the experiences, perspectives, and needs of others.

Recognition of our role in God's story
With the support of teachers and families, LCS students develop their God-given gifts and abilities and grow in areas of improvement as they live and learn in Christian Community.

Graduation Requirements

1. Students must successfully complete at least twenty-four (24) credits in order to graduate.

2. A year-long course that is taken and passed is equivalent to one credit. Semester-long courses are equivalent to one-half credit.

3. Each student must receive recommendations of the faculty, administration, and endorsement of the Board of Directors in order to graduate.

4. Individual and emergency academic situations will be addressed by the administration on an individual basis throughout the semester.

5. Students must earn credit toward graduation in the following areas:

Department	Number of credits required	Credits recommended for college-bound students
Bible	4*	4*
English	4	4
Mathematics	4**	4**
Social Studies	3	3
Science	3	4
Creative Arts	1	2+
World Language	2	3
Physical Education and Health	1	1
Electives	2	-
TOTAL NEEDED	24	24

*One Bible course is required for each year of attendance at Lansing Christian School. Therefore, transfer students will only be required to take Bible courses for the number of years of LCS attendance.
**A math course or experience is required in 12th grade the State of Michigan.

Specific Courses Required by Grade:

NINTH GRADE	TENTH GRADE	ELEVENTH GRADE	TWELFTH GRADE
Bible 9: Survey Literary Genres/ Speech & Composition Physical Science Physical Education Health	Bible 10: Practices Biology American Literature	Bible 11: Christian Living/Doctrine U.S. History (or AP)	Bible 12: Worldview Economics Government

Grades

Grades will be updated online at the end of each quarter. These are indicator grades and will not be entered on transcripts. Only grades issued at the end of the semester will be reflected on transcripts and factor in to a student's GPA. The standard GPA is calculated on a 4-point scale; grades in Advanced Placement courses are weighted on a 5-point scale.

See below for the standard LCS grading scale, standard grade points, and AP weighted grade points.

For courses transferred from other institutions, the letter grade assigned by the former school and credit will be recorded on the LCS transcript for any course listed on a transcript by **an accredited institution within the United States**. Otherwise, the transcript lists only the course and an indication that credit was earned.

Percentage range	LCS grading scale	Standard grade points	AP weighted grade points	Percentage range	LCS grading scale	Standard grade points	AP weighted grade points
95–100	A	4.00	5.00	73–76	C	2.00	3.00
90–94	A–	3.67	4.67	70–72	C–	1.67	2.67
87–89	B+	3.33	4.33	67–69	D+	1.33	2.33
83–86	B	3.00	4.00	63–66	D	1.00	2.00
80–82	B–	2.67	3.67	60–62	D–	0.67	1.67
77–79	C+	2.33	3.33	0–59	E	0.00	0.00

Credit and Grade Policies

Earning External Credit

Students are expected to earn all credit for graduation through Lansing Christian School. In some cases, students may earn credit through online courses, dual enrollment, or successful completion of a program at a local career center (e.g., Wilson Talent Center).

- A maximum of **four** high school credits may be earned externally toward graduation from LCS through online or college courses.
- Students must be enrolled for at least five credits each year, with at least four credits earned directly through Lansing Christian School.
- A student must receive prior approval from their parents/guardians and school administrators to participate in online courses, dual enrollment, and/or a career center.
- A student must receive prior approval from the principal or Director of Learning in order for the external credit to count toward graduation requirements.
- Students interested in taking online or dual enrollment courses or a career center program should fill out the required request form available in the office.

Drop/Add Policy

Students are expected to be in their scheduled classes for the entire year. Exceptions must be made through the high school office with the principal. For students to be granted a drop or add request, they must have a drop/add form signed by their parent or guardian, the teachers involved, and the principal. All course changes must be completed within the first two weeks of each semester. After that period, a "W" or withdrawal will be indicated on the transcript.

Assigning Class Rank

- To graduate as valedictorian or salutatorian of the class, a student must have attended at least the final four semesters at Lansing Christian High School.
- The final semester is not used in determining the graduation ranking.

Repeating Courses

A student, with the principal's permission, may repeat a course in which the student received a "C" grade or lower. Students scoring below a "C" grade may retake the course once for a higher grade, but can only receive credit for it once. The transcript will indicate both attempts at the course, but only the higher grade will count toward the GPA. Any student may choose to repeat certain elective courses, such as music or Teacher Aide.

Registration Procedures

Registration for the next year's classes takes place in spring of the current year. The steps for registration include:

1. Become acquainted with the High School Academic Program and Course Descriptions.

2. Complete or revise a 4-year plan.

3. Complete a course request form to be signed by parents/guardians.

4. Register for courses in Skyward.

5. Courses that require approval are noted in the course description of that class. **APPROVAL MUST BE OBTAINED BEFORE YOU WILL BE SCHEDULED INTO THE CLASS.** Submit approval forms to the office by the announced deadline.

6. Students receive a schedule before the next school year begins. Carefully review assigned courses, which are based on availability and minimizing scheduling conflicts. Classes cannot be added or dropped after the designated drop/add period.

BIBLE

Bible 9: Survey of the Bible
Grade 9
1 credit

The theme of Bible class in 9th grade is studying the Bible as a foundation of faith**.** Students will study redemptive history as recorded in Scripture, which will serve as a foundation for later studies in New Testament letters and Church history. This course begins with an overview of the entire Bible. Selected Old and New Testament lessons and themes will then be studied in depth with an emphasis on applying faith lessons from God's Word. Further studies in the Life of Christ and the Book of Acts will deepen this foundation of faith for students.

Bible 10: Spiritual Practices
Grade 10
1 credit

Spiritual Disciplines is the theme of Bible class for 10th-grade students. The Storyline of the class is, "Faith is a Journey." We will focus on the process of our faith and maturity in God not just the product. Basic Bible interpretation and study skills will be learned and applied to the study of various New Testament letters with the goal of growing in the knowledge of God. Students will learn personal and corporate Bible study, prayer, worship, and evangelism practices through both study and practical application. We will also engage in various contemporary topical studies to develop empathy and a biblical worldview with the necessary communication skills to engage and transform the world for Christ.

Bible 11: Biblical Doctrine
Bible 11: Christian Living
Grade 11
½ credit each

The theme of Bible class in 11th grade is understanding and living out a Christian calling**.** A study of the book of Romans will provide an understanding of the full gospel message—what it is and how to live it out as we pursue unity in our differences. A study of 1 Corinthians will provide an understanding of the wisdom of God and how the kingdom of heaven comes to earth. A study of Christian Apologetics will equip students with tools necessary to defend the importance of truth and to give sound reasoning for why they believe what they believe. Further studies will help students gain a perspective on God's calling, design, and purpose for their lives so they can make informed decisions about college and their future pursuits.

Bible 12: Biblical Worldview
Grade 12
1 credit

The theme for senior Bible is life beyond high school—engaging and transforming the world for Jesus Christ. Senior Bible seeks to equip students with biblical foundations, a deep prayer life and faithful inquiry essential before graduation. Students will articulate their own faith journey through a personal faith story. Throughout the course, students will hone skills of biblical interpretation, deepen their understanding of Christian worldview, discuss the sacredness and joy of marriage and family, and share their learning and faith journey with others. Students will also explore how to engage with God's heart in silence, solitude and prayer in order to live out our faith as we engage and transform the world with him.

Chapel Leadership and Planning
Grades 10-12
Application required

This is a year-long elective for students in 10th-12th grades interested in the spiritual formation of our student body. This class will involve creating and planning chapel for our high school, including organizing student volunteers, prayerfully creating engaging services, managing equipment and IT, and responsibly exploring and reflecting on best methods for ministry. An application must be filled out and approved by the Bible Department in order to enroll in this class.

CREATIVE ARTS

VISUAL ARTS

Drawing
Grades 9-12
½ credit

In this course, students will learn how to draw using pencil, charcoal, pen and pastels. Students will learn how to train their eye to accurately draw what they are seeing. They will also learn many different drawing and shading techniques.

Painting
Grades 9-12
½ credit

This course is designed to teach students how to paint using both watercolor and acrylics. Students will learn about color theory, styles of painting, and some history of painting. In this class, students will begin to develop their own style of painting.

Sculpture/Ceramics
Grades 9-12
½ credit

In this course, students will learn how to make pottery—both decorative and functional. Students will look at how different cultures use pottery as well as a brief history of pottery. They will learn how to fire and glaze clay as well as critique their work in class. Students will also work with a variety of other sculptural materials.

Mixed Media
Grades 9-12
½ credit

Students will learn how to use non-traditional materials to create art. Materials include but are not limited to: magazine, coffee, textiles, wire, glass, etc. Students will also be able to do linoleum block printing. They will also look at modern and contemporary artists who use different materials to create art. Students who love working with different materials will love this class.

Advanced Art
½ credit
Grades 11-12
Prerequisite: Must take at least 4 other Art classes. Must also be a junior or senior with approval from the teacher.

Recommended for students planning on continuing art in college. Advanced art is intended for students who want to refine their artistic skills. Students will be making and critiquing their work every few weeks. Students will choose some of their projects according to the skills they hope to improve on. This course is only for students who are self-motivated and serious about creating art.

MUSIC

Wind Ensemble
Grades 9-12
1 credit
Prerequisite: Previous band experience and/or approval from teacher

This course is designed for the development of skills through study and performance of standard band, ensemble, and solo literature. Performance opportunities may include school concerts, chapels, pep band, marching band, and community or church performances. Discussion of the spiritual characteristics of music is also included. Necessary equipment and materials include an instrument, reeds for woodwind instruments, oil for brass instruments, and drumsticks for percussionists.

Chorale
Grades 9-12
1 credit
Prerequisite: None

Chorale is an advanced performing choir for all LCS high school students. Participation in Chorale is not contingent upon past choral experience. Chorale will give students advanced instruction in singing and musicianship skills, repertoire from various eras and music styles, opportunities for small ensemble and solo singing, as well as additional group performance opportunities at concerts, in the community, and at Choir Festivals.

Individual Musicianship
Grades 9-12
1 credit
Prerequisite: None

Individual Musicianship is a class for self-driven students looking to learn a wide variety of ways to make music. In the first two quarters, we will learn to play and read music on piano and guitar. The third quarter will focus on the process of songwriting, and in the fourth quarter, students will be given the opportunity to set their own musical goals and further their music skills through individual projects. Other lessons from the wide world of music will be mixed in throughout the year to give the students an opportunity to grow into lifelong learners of music.

OTHER CREATIVE ARTS COURSES

Yearbook
Grades 10-12
1 credit

Yearbook staff will plan the entire production of the yearbook including its design and financing. Staff members will learn basics of design and layout, copy writing, photography, and selling advertising. Writing, photography, and other artistic skills are helpful for growth as collaborative workers as well as giving students the opportunity to fill positions of leadership.

Creative Entrepreneurship
Grades 10-12
1 credit

This year-long course will give students the opportunity to learn about a variety of creative professions. Students will learn different skills and art forms; examples include: graphic design, video production, photography, and creative writing. The course will include input from a variety of creative professionals. Students will engage in a variety of project-based work each semester.

ENGLISH LANGUAGE ARTS

Literary Genres
Grade 9
½ credit

Students will study the conventions of short stories and novels by reading and discussing these genres. Students will practice identifying elements of fiction and engage in literary analysis of various works from a Christian perspective.

Speech and Composition
Grade 9
½ credit

Students will study various presentation skills at the high school level. Students will refine professional writing skills by engaging in the writing process and organizing their ideas, including the completion of a formal research project. Students will review their knowledge of grammar, mechanics, and usage and master a basic level of competence in each area.

American Literature
Grade 10
1 credit

Students will learn to see authors and their works in the framework of their position in United States history, relate authors and philosophies to their works, and evaluate American literature from a Christian perspective. This course includes in-depth studies of American writers and their craft. Students will also practice literary analysis and persuasive writing in the context of the works being studied.

Composition
Grades 11-12
½ credit
Prerequisite: None

Composition is a course designed to prepare students for college and career writing experiences. Students will begin with designing an authentic resume and cover letter. Students will then engage in the writing process to create a variety of works: college essay, expository, and research. They will review and strengthen their skills in the areas of research methods, writing style, word choice, MLA format, along with grammar, mechanics, and punctuation.

World Literature
Grades 11-12
1 credit
Prerequisites: English 9 and American Literature

World Literature continues to build a foundation of knowledge, skills, and strategies to apply to more complex ideas and tasks that can be applied to reading in other content areas. In World Literature, students will read and evaluate a mixture of classical and modern texts from around the world that continue to influence thought and culture. Students will note similarities in human experience from a Christian perspective and express that understanding through a variety of assessments, including tests, essays, and projects.

AP English Literature
Grade 12
1 credit
Application required

AP English Literature is a one-year course and is the equivalent of a college-level English course. Students are expected to take the Advanced Placement examination in May. College credit may be given based on the student's score and the college the student attends. This course is designed to cultivate a student's understanding of character, setting, structure, perspective, and figurative language in the context of each work we study. Through the close reading of literary texts, students will deepen their understanding of the ways writers use language and literary techniques to portray the complexities of the human experience. Students will analyze those human experiences from a Christian perspective. The AP English Literature and Composition Examination tests the student's ability to read and clearly analyze selected poems, prose passages, and complete novels or plays. The literature taught each year varies in content.

Advanced Composition
Grades 11-12
½ credit
Application Required

Advanced Composition is a course designed to prepare students for the rigorous level of writing required in college classes. The course will be an intensive preparation for essays and papers in college courses, including in-depth academic research methods and citation requirements (MLA and APA). Students will write narrative, expository, and argumentative essays, read various selections of nonfiction, learn advanced grammatical rules and writing techniques, and write an argumentative research paper to end the semester.

Communication and Culture
Grades 11-12
½ credit
Prerequisite: Composition or Advanced Composition

Communication and Culture is a course designed to equip students for public speaking and cultural studies. The goal is to build the students' communication skills and help them critique American culture (specifically, media influences) from an informed Christian worldview. Students will analyze various cultural artifacts (advertisements, social media trends, documentaries, etc.) to access the rhetorical strategies used by modern culture.

Literature of C.S. Lewis
Grades 10-12
½ Credit
Prerequisite: Literary Genres, Speech and Composition

C.S. Lewis stands as one of the key Christian thinkers and literary figures of the 20th century. This course will work through some of Lewis' less well known, yet equally deserving, fiction writing, including his science fiction *Ransom Trilogy* and his retelling of the myth of Psyche and Cupid, *Till We Have Faces.* Alongside these, students will also read some of Lewis' apologetic work, including *The Abolition of Man*, in order to understand the ways in which Lewis grappled with humanity's relationship with technological and scientific advancement. This course is intended to strengthen students as readers and writers, and to provide a place for them to think deeply about what it means to be human.

Literature of J.R.R. Tolkien
Grades 10-12
½ Credit
Prerequisite: Literary Genres, Speech and Composition

J.R.R. Tolkien is one of the 20th century's important literary figures, and the founding father of the modern fantasy genre. Tolkien blended his Catholic faith with his love of Anglo-Saxon and Norse mythology to create a "mythology for England." In this semester-long literature elective, students will immerse themselves in Tolkien's fantasy writing, a vast mythopoetic project which still speaks to us today. This course is designed to foster a lifelong love of reading, further develop and reinforce reading and writing skills, and provide a robust introduction to Tolkien's work.

WORLD LANGUAGE

Spanish I
Grades 9-12
1 credit
Prerequisite: None

In Spanish I, students will learn to communicate effectively in Spanish in the areas of speaking, listening, reading and writing. Students will gain perspective on different cultural aspects of the Spanish-speaking world and will apply cultural competencies in "real-life" experiences that allow for growth opportunities in the Christian faith.

Spanish II
Grades 9-12
1 credit
Prerequisite: Spanish I

This course will expand students' knowledge of and ability to use Spanish. Students will advance in the areas of vocabulary, patterns, pronunciation, and structure of Spanish. Students will gain perspective on different cultural aspects of the Spanish-speaking world and will apply cultural competencies in "real-life" experiences such as giving directions, discussing what they've done, and preparing food. We will also explore the language of prayer in Spanish-speaking communities.

Spanish III

Grades 10-12
1 credit
Prerequisite: Spanish II

This course will continue to expand students' knowledge of and ability to use Spanish. Students will advance in the areas of vocabulary, patterns, pronunciation, and structure of Spanish. Students will gain perspective on different cultural aspects of the Spanish-speaking world and will apply cultural competencies in "real-life" experiences such as navigating international travel and problem-solving health issues at home and abroad. We will also continue exploring the language of prayer, as well as discuss and memorize the Lord's Prayer in Spanish.

Spanish IV
Grades 11-12
1 credit
Prerequisite: Spanish III

This course will continue to expand students' knowledge of and ability to use Spanish. Students will advance in the areas of vocabulary, grammatical patterns, and their overall ability to communicate in Spanish. Approximately 95% of instruction takes place in the target language, with little recourse made to English in the class. Students will gain perspective on different cultural aspects of the Spanish-speaking world, such as studying Christian family values that exist in Spanish-speaking communities, reading an influential novel (El Principito) to the Spanish-speaking world, and analyzing cultural artifacts that will prepare students for AP Spanish Language and Culture. These focuses will prepare the students to be culturally competent and provide growth opportunities in the Christian faith.

AP Spanish Language and Culture
Grade 12
1 credit
Prerequisite: Spanish IV
Application required

The AP Spanish course at LCS places heavy emphasis upon authentic Spanish-language texts and vocabulary acquisition while continuing to refine advanced grammatical concepts studied previously. Approximately 95% of instruction takes place in the target language, with little recourse made to English in the class. Throughout the year, the students will study the six main themes designated by the College Board's AP Spanish Language and Culture framework. It is expected that students take the AP Spanish Language and Culture exam at the end of the course. As a result of this course, students will have acquired the ability to speak, write, and interpret spoken and written text fluently within the limitations of the vocabulary and structures they have studied.

MATHEMATICS

<u>Algebra 1</u>
Grade 9
1 credit
Prerequisite: Completion of Math 8
Curriculum: Desmos Amplify Algebra 1 supplemented with Math Medic and All Things Algebra

Algebra explores the relationships of different families of functions through multiple representations applied in context. The concept of function is emphasized throughout the course. Topics include: (1) patterns and sequences, (2) linear equations and inequalities, (3) linear relationships (4) describing data, (5) describing functions, (6) systems of linear equations and inequalities, (7) advanced functions, and (8) exponential functions. Other prerequisite topics, like expressions and geometry foundations, may be reviewed. Basic factoring will be introduced.

<u>Geometry</u>
Grades 9-10
1 credit
Prerequisite: Completion of 8th-grade or high school Algebra with satisfactory mastery. May take concurrently with Algebra 2 with teacher approval.
Curriculum: Desmos Amplify Geometry supplemented with Math Medic and All Things Algebra

Geometry offers students the opportunity to explore shapes and their relationships. Students will learn to write proofs using logical reasoning skills. Geometry includes the study of constructions, transformations, congruence, similarity, coordinate geometry, circles, and solid geometry.

<u>Algebra 2A</u>
Grades 10-11
1 credit
Prerequisite: Completion of Geometry
Curriculum: Math Medic Algebra 2 supplemented with All Things Algebra

Algebra 2A is the first year of a two-year course that focuses on the study of functions. Topics include: sequences, linear functions, systems of linear functions, function transformations, factoring, quadratic functions, and polynomial functions. This course is to be taken in the student's junior year or before, to allow time to complete Algebra 2B. ***A TI-84 Series graphing calculator is required for the second semester of this course; students will not be permitted to use a graphing calculator with CAS features.***

Algebra 2B

Grades: 11-12
1 Credit
Prerequisite: Algebra 2A
Curriculum: Math Medic Algebra 2

Algebra 2B is the second year of a two-year course that focuses on the study of functions. Topics include: function operations, including composition, inverse functions, exponential functions, logarithmic functions, rational functions, and trigonometry. This course is to be taken upon completion of Algebra 2A to complete the Algebra 2 content required by the state for graduation. ***A TI-84 Series graphing calculator is required for the second semester of this course; students will not be permitted to use a graphing calculator with CAS features.***

Algebra 2
Grades 10-12
1 credit
Prerequisite: Completion of Geometry with teacher recommendation. May take concurrently with Geometry with teacher approval.
Curriculum: Jean Adams Algebra 2

Algebra 2 focuses on the study of functions and their representations, including function operations and transformations, quadratic, polynomial, power, rational, exponential, and logarithmic functions. Trigonometric functions may also be introduced. ***A TI-84 Series graphing calculator is required for the second semester of this course; students will not be permitted to use a graphing calculator with CAS features.***

AP Precalculus
Grades 11-12
1 credit
Prerequisite: Completion of Algebra 2 (or 2A and 2B)
Curriculum: Bryan Passwater AP Precalculus

AP Precalculus is a more intensive, abstract study of functions and other algebraic and geometric topics. Specific attention is paid to conceptual understanding and making connections between several different concepts along with deepening and mastering previously introduced topics. **The course is broken down into four units of study: Polynomial and Rational Functions, Exponential and Logarithmic Functions, Trigonometric and Polar Functions, and Functions involving Parameters, Vectors, and Matrices.** This course prepares students for Calculus or other college-level classes and reinforces understanding of the mathematics introduced in previous high school courses. In 2023-2024, Precalculus students will have an opportunity to prepare and register for the AP Precalculus exam. ***A TI-84 Series graphing calculator is required.***

<u>Statistics and Probability</u>
Grade 12
½ credit
Prerequisite: Algebra 2 (or 2A and 2B)

This course will review the basics of statistics and probability as well as extend students' understanding of how to interpret statistics, generate statistics, and use them appropriately. Topics include measures of central tendency and spread, counting and probability, statistical inference, and representing data numerically and graphically. It will be offered first semester.

<u>Math Seminar</u>
Grade 12
½ credit
Prerequisite: Algebra 2 (or 2A and 2B)

This class will focus on math "out of school," emphasizing how math is used in a variety of careers as well as our personal finances. After an introductory unit on mathematical modeling, we will invite guests to share how they use mathematics in their careers. Examples include engineering, medicine, construction, business management, creative arts, and culinary arts. Students will engage in projects designed to give experiences using mathematics to design solutions to real problems. The other primary unit will explore mathematics in personal finance, including budgeting, saving and investing, and loans and debt. ***A TI-84 Series graphing calculator is required.***

<u>AP Calculus AB</u>
Grades 11-12
1 credit
Prerequisite: Precalculus
Application required
Curriculum: Jean Adams AP Calculus AB

In this course, we will study introductory Calculus. Students in AP Calculus will be asked to think deeply and critically. It will require a *strong* understanding of algebra, geometry, and Precalculus. Some topics we will study include: limits, differentiation, Riemann sums, integration, the Fundamental Theorem of Calculus, differential equations, slope fields, and applications of both derivatives and integrals in context. Students will be asked to apply basic Calculus concepts to analyze data, interpret meanings and situations, create mathematical proofs, draw conclusions about data and mathematical problems, and solve application problems. ***A TI-84 Series graphing calculator and/or a TI-Nspire CAS graphing calculator is recommended.***

<u>AP Statistics</u> (last offered 2021-22)
Grades 11-12
1 credit
Prerequisite: Completion of Precalculus with a grade of C or better or completion of Algebra II with a grade of B or better.
Application required
Textbook: The Practice of Statistics for the AP Exam, 6th edition; Bedford, Freeman & Worth

The purpose is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to:

- Exploring data: Describing patterns and departures from patterns
- Sampling and Experimentation: Planning and conducting a study
- Anticipating Patterns: Exploring random phenomena using probability and simulation
- Statistical Inference: estimating population parameters and testing hypotheses

The course will include the use of technology, projects and labs, group problem-solving, and writing. This allows students to build connections with other subjects and the world. ***A TI-84 Series graphing calculator is required.***

<u>Computer Programming</u>
Grades 10-12
1 credit
Prerequisite: Geometry

The tools and techniques of computing are essential to almost every workplace in today's world. This elective course allows students to explore and develop those tools and techniques. Students learn effective use of existing tools as well as strategies for developing new computing solutions. Emphasis is placed on both the creative skills involved in software design and the logical skills required to produce working code. Computer applications include data handling, networking, and electronic control systems. For their final project, students are expected to program and operate a robotic device.

PHYSICAL EDUCATION

<u>Physical Education</u>
Grade 9
½ credit
Prerequisite: None

The primary focus of Physical Education will be on making healthy choices, personal fitness and nutrition, and individual & team sports. The goal is to provide students with the knowledge and experience necessary to improve their health and to expose students to activities and skills that will benefit them now and in the future. We want to develop an understanding of personal health and wellness, emphasizing one's body as God's temple, and maintaining a lifestyle that includes care of both the body and soul. Physical Education includes units on personal fitness as well as various team and individual sports.

<u>Health</u>
Grade 9
½ credit
Prerequisite: None

The primary focus of Health will be on making healthy choices, personal fitness and nutrition, and individual & team sports. The goal is to provide students with the knowledge and experience necessary to improve their health and to expose students to activities and skills that will benefit them now and in the future. We want to develop an understanding of personal health and wellness, emphasizing one's body as God's temple, and maintaining a lifestyle that includes care of both the body and soul. The health course includes units on nutrition, physical fitness, refraining from any type of substance abuse, social & emotional health, and having healthy and responsible relationships.

<u>Advanced PE</u>
Grades 10-12
½-1 credit
Prerequisite: PE 9/Health

This semester-long physical education course focuses on developing the skills and strategies needed to participate in a number of team and individual/partner sports. Skill units will be focused largely around game play, with competition being a major component of the class. Advanced PE is a team sports option that is geared toward more highly competitive, fast-paced game play. Students choosing this class should be prepared for a more competitive class dynamic.

Lifelong Sports
Grades 10-12
½-1 credit
Prerequisite: PE 9/Health

This semester-long physical education course focuses on developing the skills needed to participate in a number of team and individual/partner sports. Skill units will be focused largely around game play, with recreational game-play being a major component of the class. Lifelong Sports is a team sports option that is geared more toward enjoying sport for fun gameplay, community building, recreational exercise, and learning & developing sports skills in a variety of aspects. Students choosing this class can look forward to daily exercise through game play that is more cooperative, but still has a lighter competitive edge.

Weight Training
Grades 10-12
½-1 credit
Prerequisite: PE 9/Health

This weight training class course will provide students with knowledge required to understand and compile various basic exercises into a comprehensive weight training program focused on muscular strength and hypertrophy. Students will be able to properly demonstrate exercises for safe performance, they will understand why each exercise targets the desired muscle, and they will understand how to set goals for individual achievement and lifetime fitness.

Athletic Leadership
Grades 10-12
½-1 credit
Prerequisite: PE 9/Health

The Sports Management course is designed to equip students with the skills and knowledge necessary to manage and officiate various sports at the high school level. Through a combination of classroom instruction and on-field practice, participants will learn the rules, mechanics, and responsibilities of refereeing, while developing the confidence to manage games effectively and fairly. The course emphasizes communication, decision-making, conflict resolution, and maintaining a safe and positive environment for athletes and coaches. Upon completion, students will be prepared to take on officiating roles for school competitions, gaining valuable leadership experience and contributing to the success of the LCS athletic program and those in the broader community.

SCIENCE

<u>Space Physics</u>
Grade 9
½ credit
Prerequisite: None

In this course, students will explore the wonders of God's creation through the study of physical science. With an emphasis on scientific reasoning and problem-solving, students will develop skills in asking questions, analyzing data, constructing explanations, and communicating scientific ideas. Hands-on activities, laboratory investigations, and collaborative projects will reinforce key concepts in observation and measurement and planetary science, as well as the study of stars and galaxies. Throughout the course, students will be encouraged to think critically and appreciate the beauty and order of the universe, all while engaging in meaningful discussions and practical applications of scientific principles.

<u>Environmental Chemistry</u>
Grade 9
½ credit
Prerequisite: None

In this semester-long course, students will learn about the inner workings of God's creation. The curriculum will focus on developing science practices including asking questions, using models, performing investigations, analyzing and interpreting data, and constructing explanations. Topics will include scientific measurement and calculations, properties of matter, atomic structure and interactions, and applications to earth science focused on watersheds.

<u>Biology</u>
Grade 10
1 credit
Prerequisite: Physical Science

In this year-long course, students will learn about the complex and awe-inspiring living world that God has created. Topics will include Biology as a Scientific Discipline, Ecology with applications to Earth Science, the Five Kingdoms, Human Anatomy and Physiology, the Cell, Human Reproductive Anatomy and Fetal Development, Genetics, DNA, Biotechnology and Evolution.

Chemistry
Grades 10-12
1 credit
Prerequisites: Algebra I and Biology (Application and teacher approval required to take Biology and Chemistry concurrently with teacher approval.)

This course begins with an in-depth study of chemical compounds and reactions, emphasizing nomenclature and stoichiometry. From there begins a survey of important chemistry topics, including thermochemistry, ideal gas behavior, electron configurations, bonding theories, acids and bases, oxidation-reduction, and electrochemistry. The course focuses on successful problem solving and effective scientific communication. This course is not available to students who have completed AP Chemistry.

Anatomy and Physiology
Grades 11-12
1 credit
Prerequisites: Biology

This course will examine the anatomy, physiology, regulation, biochemistry, and integration of various organ systems in the human body. In doing so, students will see how structure relates to function in God's masterful design of the body. Students will be able to describe the structure (gross anatomical and histological) and function of the following individual body systems: nervous, endocrine, digestive, muscular, cardiovascular, respiratory, renal and reproductive. Emphasis is on normal function, but appropriate clinical aspects may be discussed. Laboratory topics, including dissection of anatomical specimens, will complement the lectures. This course is designed for students preparing for health occupations or those simply interested in the functioning of the human body.

Physics
Grade 11-12
1 credit
Prerequisites: Algebra 2 (waived with A or A- in Geometry)**, Physical Science, and Biology**
This course counts as a 4th-year math experience.

This course will focus on the conceptual understanding of God's creation through the laws of physics including the nature and interactions of matter and energy. Topics include: motion and forces, energy, waves, sound, light, electricity and magnetism. This course will use mathematics as a language in which we can explain physical phenomena. Laboratory experiences and techniques are stressed. Students will also develop problem solving and critical thinking skills in application of scientific knowledge to real-world explanations.

<u>AP Chemistry</u>
Grades 11-12
1 credit
Prerequisites: Biology and Algebra II
Recommendation: Chemistry in preceding year
This course counts as a 4th-year math experience.
Application required

AP Chemistry focuses on studying the properties and behavior of matter that arise from its atomic nature, including chemical reactions. The course follows the curriculum outlined by the College Board, which closely matches a first-year college-level survey course. Students will also engage in science practices as described by the College Board and will develop these skills through inquiry labs and activities. The course emphasizes conceptual mastery in preparation for the Advanced Placement Exam in May. A passing score on the Exam may result in the student receiving credit and/or advanced placement in college. Because of the depth and breadth of the content in this course, students are encouraged to take Chemistry in the preceding year.

<u>AP Physics 1</u> (last offered 2018-19)
Grades 11–12
1 credit
Prerequisites: Precalculus (waived with an A or A– in Algebra 2) **and Biology.**
This course counts as a 4th-year math experience.
Application required

AP Physics 1 provides a systematic introduction to the principles of Newtonian mechanics, and emphasizes the development of problem-solving ability. The course follows a typical first-semester college curriculum in non-calculus-based physics, spread out over a one-year course. Topics to be covered include motion, forces, momentum, work, energy, orbital gravity, torque, rotations, oscillations, and waves. Students will have the option to pay for and take the Advanced Placement Exam in May. A passing score on this Exam may result in the student receiving credit and/or advanced placement in college.

AP Biology
Grade 12
1 credit
Prerequisites: Biology and Chemistry
Application required

AP Biology is a college-level course that allows for students to do an in-depth study of God's creation. We will focus on the four Big Ideas set forth by the College Board in the AP Biology curriculum which include evolution, energy dynamics, information transfer, and interactions from the molecular to the ecological levels. Students will also engage in science practices as described by the College Board and will develop these skills through inquiry labs and activities. Students who complete this course are expected to take the Advanced Placement exam. A passing score on this Exam may result in the student receiving credit and/or advanced placement in college.

SOCIAL STUDIES

World History
Grades 9-10
1 credit
Prerequisite: None

World History is a one-year course that begins with The Middle Ages and concludes with the 19th century. The first semester will focus on Medieval, Byzantine, Islamic and Renaissance era civilizations. The second semester will focus on the Age of Absolutism, the French Revolution, India & China and the 19th century. This course will enable students to have a broad understanding of many world civilizations with an emphasis on the history and development of western civilization.

AP World History
Grades 9-10
1 Credit
Application Required–Fulfills World History Requirement

This course surveys world history from AD 1200 to the present, building on the foundation students have developed in Middle School. Beginning with the High Middle Ages, this course will explore topics like the Renaissance and Reformation, the Enlightenment, the Industrial Revolution, both World Wars, and the Cold War. As an Advanced Placement class, this course reflects the rigor and expectations of an introductory collegiate history course. Students are encouraged to take the AP exam in May and those who perform well have the opportunity to

earn college credit. In order to prepare, students will work to develop their critical reading and writing skills, learn to assess and evaluate primary source documents, and write coherent arguments grounded in evidence and sound reasoning.

Current Events
Grades 9-12
1 credit
Prerequisite: None

In Current Events, students will investigate the ever-changing events of the modern world. The course will consist of units on the regions of the world. Each unit will focus on the geography, recent history, and culture of the regions and their relevance to current events. In this course, we will follow national and global current events by watching, reading, and discussing news stories from television, newspapers, and news magazines. This course is designed to increase a student's knowledge of the world as it exists today and to focus on content that will enhance a student's understanding of World History, Government, Economics, and US History.

World War II
Grades 10-12
1 Credit
Prerequisite: World History or Current Events

This elective is a year-long course aimed at looking extensively at the Second World War. Students will be challenged and encouraged to think independently about the causes of the war as well as the manner in which the war was fought. This course will include in-depth studies on the nature and organization of the Nazi regime, as well as the Holocaust. The course ends with a look at how the end of World War II contributed to the Cold War.

Psychology
Grades 10-12
1 credit
Prerequisites: None

Psychology is designed to introduce students to basic principles of human development and the complexities of the human mind. Students will explore the major core principles and theories of psychology as well as the individuals who contributed to their development. Students will gain an academic comprehension and appreciation for the human mind while analyzing the field of psychology from a biblical perspective.

United States History
Grade 11
1 credit

American History is a one-year course that begins after the American Civil War. The units of the course cover the late 19th century through the late 20th century. The course will emphasize the great personalities, ideas, wars, and trends in the development of the United States. The content of this course will give students a historical perspective on the United States and how it developed. This course will also enable a student to understand and interpret current events.

AP United States History
Grade 11
1 credit
Application required - fulfills U.S. History requirement

This course is a survey of American History from the colonial era to the present-day United States. The course will provide the students with analytic skills and factual knowledge that is necessary to deal critically with the problems and materials in United States history. The course will prepare students for college courses by making demands upon them equivalent to those made by introductory college courses. The course will develop skills that are necessary to make conclusions based on an informed judgment by learning to assess historical materials and focusing on primary documents. The course will incorporate lecture, discussion, and examination of materials to meet the goals for the course.

Economics
Grade 12
½ credit
Required

Senior economics is a basic introduction to free market economics. Macro-economics is studied, with specific units on the relationship between economics and politics; distribution of income; marketing systems; supply, demand, and prices; theory, structure, and organization of business in the United States. Comparisons are made between the economic systems of communism, socialism, and capitalism. Intensive integration of Biblical economic principles is taught.

Government
Grade 12
½ credit
Required

This course focuses on how the United States Government functions. It will emphasize the institutions of the United States Government (Congress, the courts, the presidency, and the executive bureaucracy). We will also focus on unique aspects of the United States Government including the systems of separation of powers, checks and balances, and federalism. Special emphasis will also be given to the Bill of Rights and civil liberties.

OTHER COURSES OR ACTIVITIES AVAILABLE

Media Center Aide
Grades 10-12
½ to 1 credit
Requires approval from Information Technology Manager

A Media Center Aide should be a responsible and self-motivated student, able to independently follow through with instructions. Duties include: checking books in and out, filing cards, helping with overdue lists and notices, updating computer records, shelving books, and assisting with basic technology updates and tasks. Media Center aides will be evaluated on their performance and growth and complete a required self-reflection each semester.

Office Aide
Grades 10-12
½ to 1 credit
Requires administrative approval

An Office Aide should be responsible and self-motivated, willing to listen to and follow instructions. Training will be provided as needed. Office Aides will be evaluated on their performance and growth each quarter. Duties include preparing materials, communicating with students, running errands within the school, and other miscellaneous tasks required in an office environment. Office Aides will be evaluated on their performance and growth and will complete a required self-reflection each semester.

Elementary Teacher Aide
MS/HS Teacher Aide
Grades 10-12
½ to 1 credit
Requires teacher approval

A teacher aide should be responsible and self-motivated, willing to listen to and follow instructions. Responsibilities will include a variety of tasks to support the teacher's work, such as grading, making copies, and preparing materials. Teacher Aides will be evaluated on their performance and growth and complete a required self-reflection each semester. Teacher aide assignments are available in elementary, middle, and high schools.

Work-Based Learning

Grade 12
½ to 1 credit
Requires approval from Principal and employment supervisor

Work-based learning is an experience in which students regularly leave school for a specified period of time (e.g., one class period) to work at their place of employment. Students will be evaluated on their performance and professional growth each semester.

Educational Support Services

Grades 9-12
Requires teacher approval

Educational Support Services (ESS) seeks to complement and extend the classroom experience for students with academic challenges. Students who qualify for ESS services and require a Study Skills course with ESS should register for Study Skills, and upon request, their Study Skills will then be assigned to ESS.